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10/665,678	09/19/2003	Toshie Imai	MIPFP057	6257

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EXAMINER

SAUNDERS, PAUL

ART UNIT	PAPER NUMBER
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2609

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,678

Applicant(s)

IMAI, TOSHIE

Examiner

Paul Saunders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/27/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. **Claims 1, 11, 12 and 22** objected to because of the following informalities:

It is not clear that the phrase "operation information for" is referring to the operation settings for the image generating device at the time of image capture as taught by the specification (p10 line 6) and not operation information for use by and/or command of the image generating device. The following is suggested: "operation information of"

2. **Claim 8 and 19** object to because of the following informalities:

The phrase "device according claim" could be written clearer. The following is suggested: "device according to claim."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. **Claim 1-3, 9-10, 12-14, 20-21, 23** rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No. 2002/0008771 A1 (09/828,767) of Uchino et al. ("Uchino").

As to **claims 1 and 12**, Uchino discloses an image processing device 1 for processing an image using image data generated by an image generating device 1, and image generation record information that is associated with the image data (fig. 6 S15, page 3 [0050], page 4 [0062], [0071] lines 10-12) and that includes operation information for the image generating device (page 1 [0009] line 4-7, page 3 [0049], [0057] lines 5-7) at the time that the image data is generated (page 3 [0049] lines 5-9, page 4 [0062] lines 4-7), the image processing device comprising: a judging section 321 configured to execute a backlight decision as to whether or not to execute backlight adjustment processing (page 4 [0062] lines 14-18, [0065] lines 6-10), based on both the image generation record information and the image data (page 5 [0073] line 9, [0072-0073] – scene information is calculated using image generation record information, metering values are calculated using image data); and an image quality adjuster that, when it is decided to execute the backlight adjustment processing (page 4 [0062] lines 14-18, [0065] lines 6-10), executes backlight adjustment processing to increase brightness value of at least some pixels in the image data (page 4 [0065] line 8, page 5 [0072] line 16, [0074] line 4).

As to **claims 2 and 13**, Uchino further discloses, an image processing device according to claim 1, wherein when the image generation record

information includes subject position information indicating a position of a subject in the image 731 (fig. 11, 12, page 5 [0073]), the judging section 321 uses the subject position information in executing the backlight decision (fig. 8, 13, page 5 [0073, 0076]).

As to **claims 3 and 14**, Uchino discloses, an image processing device according to claim 2, wherein the judging section analyses the image data with a weight distribution that has different magnitudes at the subject position 731 (fig. 10 S43, page 3 [0049], page 4 [0067-0068], page 5 [0074] line 4 – The metering value used in image correction will vary over the subject position area 731, from area 71 to area 71) and other positions 732 (page 5 [0074]), and execute the backlight decision according to the analysis result (fig. 10 S43, page 4 [0067-0068]).

As to **claims 9 and 20**, Uchino discloses, an image processing device according to claim 1, wherein the image quality adjuster 26 determines intensity of the backlight adjustment processing based on both the image generation record information and the image data (S43, p67-68, p74 (line 4)).

As to **claims 10 and 21**, Uchino discloses, an image processing device according to claim 9, wherein when the image generation record information includes subject position 731 information indicating a position of a subject in the image (fig. 12, page 5 [0073] lines 10-12), the image quality adjuster analyses the image data with a weight distribution that has different magnitudes at the subject position 731 (S43, page 3 [0049], page 4 [0067-0068] – The metering

value used in image correction will vary over the subject position area 731, from metering area 71 to metering area) and other positions 732 (page 5 [0074]), and determines intensity of the backlight adjustment processing according to the analysis result (S43, page 4 [0067-0068]).

As to **claim 23**, Uchino discloses a computer program product comprising (page 6 [0085, 0087]): a computer readable medium (page 6 [0085] lines 4-5); and a computer program (page 6 [0085] line 2) stored on the computer readable medium, the computer program including a first program causing a computer 40 to execute a backlight decision as to whether or not to execute backlight adjustment processing (fig. 19, page 6 [0097-0098, 0101], based on both the image generation record information and the image data (page 5 [0073] line 9, [0072-0073]); and a second program, when it is decided to execute the backlight adjustment processing (page 4 [0062] lines 14-18, [0065] lines 6-10), causing the computer to execute backlight adjustment processing to increase brightness value of at least some pixels in the image data (page 4 [0065] line 8, page 5 [0072] line 16, [0074] line 4).

5. **Claims 11 and 22** rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,145,597 B1 to Kinjo.

As to **claims 11 and 22**, Kinjo discloses, an image output device 16 for outputting an image using image data generated by an image generating device 12, and image generation record information that is associated with the image data (col. 17 lines 10-18, 30) and that includes operation information for the

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image generating device (col. 4 lines 23-33, col. 9 lines 51-58) at the time that the image data is generated (col. 4 line 25, col. 8 line 47), the image output device comprises: a judging section configured to execute a backlight decision as to whether or not to execute backlight adjustment processing (col. 9 line 66, col. 20 lines 35-60), based on both the image generation record information (col. 20 lines 63-64) and the image data (col. 6 lines 51, 49-54, col. 14 lines 18-23); an image quality adjuster that, when it is decided to execute the backlight adjustment processing, executes backlight adjustment processing to increase brightness value of at least some pixels in the image data (col. 4 lines 19-35, col. 14 line 20, 18-23, col. 15 lines 17-33, col. 20 lines 39-40, 63-64); and an output section for outputting an image according to the image quality-adjusted image data (col. 10 lines 13-26, col. 14 lines 60-67, col. 15 lines 1-10).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 4-5, 15-16** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0008771 A1 (09/828,767) of Uchino et al. ("Uchino"), in further view of U.S. Patent No. 6,249,362 B1 to Sato et al. ("Sato").

As to **claims 4 and 15**, Uchino does not expressly disclose them.

Sato discloses an image processing device, wherein when the image generation record information 519 includes flash information of a supplemental light source at the time of generation of the image data (col. 13 lines 5-9), the judging section decides based on the flash information whether illumination with light by the supplemental light source has been performed (fig. 34, col. 22 lines 60-67, col. 23 lines 1-10) at the time of generation of the image data (col. 13 lines 8-9), and uses a result of this decision in executing the backlight decision (fig. 34 S348).

Uchino and Sato are analogous art because they are from the same field of endeavor namely image processing devices.

At the time of the invention it would have been obvious to one skilled in the art to modify the image related information in Uchino's camera to further include flash information and use this information in the backlight decision process as taught above by Sato. The motivation would have been to only execute backlight when needed (Sato col. 4 lines 41-59).

Therefore it would have been obvious to combine Uchino and Sato to obtain the above modifications.

As to **claims 5 and 16**, Uchino discloses an image processing device, the judging section 321 executes the backlight decision based on brightness values of the image data (S43, page 3 [0053], page 4 [0067-0068]), and when the supplemental light source 101 is fired (page 2 [0039] line 3-4), reflected light is detected (page 3 [0047]).

Sato discloses, an image processing device, wherein a judging section, using the flash information from image capture can identify when strobe was not used (weather off or not available), and strobe was used (col. 22 lines 60-67, col. 23 lines 1-10).

Uchino and Sato are analogous art because they are from the same field of endeavor namely image processing devices.

At the time of the invention it would have been obvious to one skilled in the art to modify Uchino's camera to further utilize the flash information from the image generation record to identify flash use conditions as taught above by Sato.

The same motivation is used as was for claim 4.

8. **Claims 6 and 17** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0008771 A1 (09/828,767) of Uchino et al. ("Uchino"), in further view of U.S. Patent No. 6,249,362 B1 to Sato et al. ("Sato") in further view of U.S. Patent Application No. 2004/0101296 A1 (10/660,074) of Nakata et al. ("Nakata"), in further view of U.S. Patent Application No. 2003/0142224 A1 (10/350,030) of Fukuda et al. ("Fukuda").

As to **claim 6 and 17**, Uchino does not expressly disclose them.

Nakata discloses, an image processing device, wherein the image generation record information further includes information relating to a distance between the subject of the image data and the image generating device () at the time of generation of the image data,

Nakata discloses an image processing system with judging section to compare subject distance to predetermined criteria to determine scene type when the flash is used and not used (fig. 17, page 10 [0133-141]); and also determining backlight conditions based on image brightness (fig. 31A S133) when a decision that the subject distance is equal to or greater than the predetermined threshold value (fig. 31A S137); and deciding not to execute the backlight adjustment processing (fig. 31A 143-145) when a decision (fig. 31A S137) that the subject distance (fig. 31A S131) is less than the predetermined threshold value.

Uchino and Nakata are analogous art because they are from the same field of endeavor namely image processing devices.

At the time of the invention it would have been obvious to one skilled in the art to modify the backlight section of Uchino's camera to further take into account flash information and subject distance as taught above by Nakata. The motivation would have been to more accurately determine backlight conditions (Nakata page 4 [0062]).

Fukuda discloses image data with header information including subject distance information (fig. 3) at the time of capture (page 3 [0035] line 35).

Uchino and Fukuda are analogous art because they are from the same field of endeavor namely image processing devices.

At the time of the invention it would have been obvious to one skilled in the art to modify Uchino's image generation record information section to also

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store the distance as taught above by Fukuda. The motivation would have been to make available to a computer or printer the image capturing condition information including distance (Fukuda page 2 [0027-28]).

The same motivation is used as was for claim 5.

9. **Claims 7-8, 18-19** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0008771 A1 (09/828,767) of Uchino et al. ("Uchino"), in further view of U.S. Patent No. 7,145,597 B1 to Kinjo.

As to **claims 7 and 18**, Uchino does not expressly disclose it.

Kinjo discloses a camera with GPS, where upon image capture part of the image related information is subject location related information such as the location of the camera, direction of the camera and/or magnification of the camera (col. 15 lines 64-67) wherein the three together may approximate the actual subject location which may also be included as part of the image related information (col. 17 lines 46-67, col. 18 lines 1-4). Further the camera is then able to determine if subject location is outdoors (col. 17 lines 1-2, col. 20 lines 39-40). Using this determination the camera is able to make backlight adjustment (col. 20 lines 55-60).

Uchino and Kinjo are analogous art because they are from the same fields of endeavor namely image processing devices.

At the time of the invention it would have been obvious to one skilled in the art to modify the camera as taught above by Uchino to further include subject location information from GPS to assist in the subject location type decision to

aid in the backlight decision as taught above by Kinjo. The motivation would have been to ensure higher quality prints/images (Kinjo col. 3 lines 63-66, col. 21 lines 45-51).

Therefore, it would have been obvious to combine Uchino and Kinjo to obtain the above modifications.

As to **claims 8 and 19**, Uchino discloses, an image processing device according claim 7, wherein when a decision of the subject location is made (page 3 [0058]), the judging section 321 executes the backlight decision using brightness values of the image data (S43, page 3 [0053], page 4 [0067-0068]).

Uchino does not expressly disclose wherein when the subject location is decided outdoors.

Kinjo discloses, a camera wherein when a decision that the subject location is an outdoor location is made (col. 20 lines 35-40),

Uchino and Kinjo are analogous art because they are from the same field of endeavor namely image processing devices.

At the time of the invention, it would have been obvious to one skilled in the art to modify the camera, as taught above by Uchino, which judges subject location to also include outdoors as a possible subject location as taught above by Kinjo. The motivation would have been to expand the functionality of the camera by considering other possible special scenes or subject locations (Uchino page 5 [0072]).

Therefore it would have been obvious to combine Uchino and Kinjo to obtain the above modifications.

10. **Claims 11 and 22** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0008771 A1 (09/828,767) of Uchino et al. ("Uchino"), in further view of U.S. Patent Application No. 2002/0167592 A1 (10/071,836) of Toyoda et al. ("Toyoda").

As to **claims 11 and 22**, Uchino discloses image data generated by an image generating device 1, and image generation record information that is associated with the image data (fig. 6 S15, page 3 [0050], page 4 [0062], [0071] lines 10-12) and that includes operation information for the image generating device (page 1 [0009] line 4-7, page 3 [0049], [0057] lines 5-7) at the time that the image data is generated (page 3 [0049] lines 5-9, page 4 [0062] lines 4-7), the image output device comprises: a judging section 321 configured to execute a backlight decision as to whether or not to execute backlight adjustment processing (page 4 [0062] lines 14-18, [0065] lines 6-10), based on both the image generation record information and the image data (page 5 [0073] line 9, [0072-0073] – scene information is calculated using image generation record information, metering values are calculated using image data); an image quality adjuster that, when it is decided to execute the backlight adjustment processing (page 5 [0073] line 9, [0072-0073]), executes backlight adjustment processing to increase brightness value of at least some pixels in the image data (page 4 [0065] line 8, page 5 [0072] line 16, [0074] line 4)

Toyoda discloses an image generating device (fig. 1) which can utilize the image data in an image output device (fig. 2) for outputting an image; and an output section for outputting an image according to the image quality-adjusted image data (fig. 6 S613, fig. 7).

Uchino and Toyoda are analogous art because they are from the same field of endeavor namely image processing systems.

At the time of the invention it would have been obvious to one skilled in the art to modify Uchino's camera to further include a image output device as taught above by Toyoda. The motivation would have been to combine and control the whole process from image creation to formation such that the desired image may be reproduced as originally intended (Toyoda page 2 [0025] lines 2-4).

Therefore it would have been obvious to combine Uchino and Toyoda to obtain the above modifications.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent No. 7,167,203 B1 to Yukawa is related to claim 4.

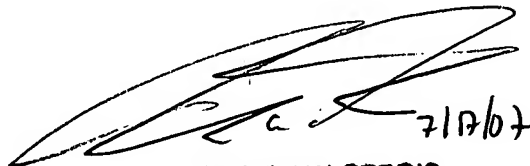
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Saunders whose telephone number is 571.270.3319. The examiner can normally be reached on Mon-Fri 8:30am-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on 571.272.3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PS/



DERRICK W. FERRIS
SUPERVISORY PATENT EXAMINER